Radioactive Material License Amendment Statement of Basis

Envirocare of Utah, Inc. 46 West Broadway Salt Lake City, Utah 84101

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Purpose

The purpose of Statement of Basis is to describe changes to Radioactive Material License Number UT2300249; Envirocare of Utah (licensee) commercial radioactive waste disposal facility. The Envirocare facility is located near Clive, Tooele County, Utah; Section 32 Township 1, South Range 11 West. These changes if approved, will result in License Amendment 20. Specifically, the licensee request changes to: 1) the Waste Management Plan; 2) Appendix I, Organization; 3) License Condition 76, 78 C & 79; and 4) License Condition 14B.

Major License Changes

1. Elimination of specific isotopes listed in table 6,7 and 8.

Radioactive Material License (RML) UT 2300249, amendment 19 dated June 8, 2004, allows the licensee to receive and dispose mixed waste containing radioactivity up to Class A limits as defined in Utah Radiation Control Rule R313-15-1008, at the Mixed Waste Landfill Cell. Specifically, License Condition 9.E. was revised allowing the licensee to receive posses, and dispose of Class A Low-Level- Radioactive Waste and NARM (natural occurring or accelerator-produced radioactive material) at both the Class A Low level cell and the mixed waste cell. In addition to Class A limits at the mixed waste cell, the Low Activity Radioactive Waste (LARW) Cell is full and no longer receiving waste, so isotope specific concentration is no longer necessary.

The Utah Division of Radiation Control (UDRC) for clarity and consistency intends to eliminate the specific isotopes and concentrations listed in table 6, 7 and 8. The concentration per container no longer applies to waste received at the facility, because Class A limits apply at both the Class A cell and Mixed Waste Landfill cell and the LARW cell waste placement is completed. Therefore, the UDRC proposes the following language regarding conditions 6, 7 and 8.

7. Chemical and/or physical form Maximum Radioactivity Radioactive Material and/or quantity of material the (element and mass licensee may possess at any number) one time. A. Notwithstanding Conditions 9 20.000 Curies*** A. Any Radioactive A. (Authorized Use), 16 (Prohibitions Material including and Waste Requirements), and 56 Special Nuclear (containerized waste), typically Material specified in large volume, bulky or License Condition 13A. containerized, soil or debris. Debris through J. can include both decommissioning (cleanup) and routinely generated operational waste including but not limited to radiologically contaminated paper, piping, rocks, glass, metal, concrete, wood, bricks, resins, sludge, tailings, slag, residues, personal protective equipment (PPE) that conforms to the size limitations in currently approved Construction QA/QC Manual. B. Special Nuclear B. See.7A. above B. As specified in License Material (SNM) Condition 13A. through J.

***Applies to undisposed maximum quantity at the LLW Class A disposal cell and the Mixed Waste landfill

2. Elimination of the Waste Management Plan, License Condition 59.

Envirocare's original request dated February 14, 2003 (CD03-0073) made numerous changes to the Waste Management Plan. In as much, the DRC discussed the option of eliminating the WMP because most of the requirements in the Waste Management Plan (WMP) are located in some other portion of the Radioactive Material License (RML) or Ground Water Discharge Permit (Permit). Based upon redundant requirements in the WMP with requirements found in the RML or Permit, the DRC has elected to move certain requirements into License Conditions, the Waste Characterization Plan, the Construction Quality Assurance Quality Control (CQA/QC) Manual and the Permit. A redline strikeout version of the WMP is attached for review. This redline/strikeout version indicates whether the requirement was moved or deleted.

History -Waste Management Plan

On February 14, 2003 (CD03-0073) Envirocare requested changes to the WMP. The DRC reviewed the submission and on February 19, 2003 via email requested Envirocare to submit the amendment fee and further justification for the changes in the Plan. DRC staff reviewed

the initial submission and the additional information regarding the changes. On April 23, 2003, a memorandum was provided to the Low-Level Waste Section Manager regarding the review. In summary, there were approximately 45 changes made to the WMP. Seventeen of the forty-five changes were minor, the remaining 28 required additional information. DRC staff recommended that several other changes be made, and based on their review, the WMP and the Ground Water Discharge Permit (Permit) contained identical requirements prohibitions and authorized uses and was determined redundant and unnecessary. In as much, over the last year, DRC staff and Envirocare collaborated regarding several issues regarding the elimination of the WMP. All requirements, prohibitions, and commitments made in the WMP were incorporated into one of the following documents: the Waste Characterization Plan (WCP), Construction Quality Assurance Quality Control Manual (CQA/QC), GWDP Permit, or a condition in the License. The Draft License is attach, with all other documents available at the DRC office for review.

Minor License Changes

1. <u>License Condition 32</u>:

Appendix I, Organization: Envirocare requested changes to Appendix I, February 19, 2004, and then made revisions to that submittal on April 8, 2004. The DRC provided comments via email on April 15, 2004, with Envirocare providing a revised Appendix I, rev.16; dated April 20, 2004. Based on DRC's review, Appendix I. Revision 16 can be incorporated into the RML, Condition 32.

Specific changes are as follows: 1) deleted the word "senior" in Section I.1.1; 2) clarified the Construction Quality Assurance Officer reports to the Corporate Quality Assurance Manager (CQAM); 3) provided clarification of QA oversight in Section I.1.4; 4) added Risk Management under the Director of Safety and Compliance in Section I.1.3; and 5) added the Senior Vice President position and responsibilities under Administration section I.1.1, and qualifications for the position.

2. License Condition 31:

Radiation Safety Officer for bulk waste(s). Envirocare has identified Joe Heckman as the Bulk Waste Facility Corporate Radiation Safety Officer. Envirocare is requesting this change because the currently listed individual is being promoted to Vice President of Compliance and Permitting.

The DRC reviewed the individual credentials and experience and find no reason not to grant this request. Therefore, License Condition 31 will identify Joe Heckman as the Corporate Radiation Safety Officer for the Bulk Waste Facility.

3. License Condition 76 and 78 C. and 79:

The licensee requested revisions to License Conditions 76, and 78.C in a letter dated September 24, 2003. The DRC reviewed the submission and had several discussions with the licensee about the proposed changes regarding each License Condition. The DRC and licensee agreed that the proposed language to condition 76 was difficult to inspect against and therefore could not be acceptable. Through collaboration, the DRC and licensee agreed to the following proposed language. "Except while waste packages are being handled in the active areas of the Containerized Waste Facility, external gamma radiation levels shall not exceed 40 mR/hr at one meter from the surface of any emplaced waste package or from shielding placed around disposed waste containers. Measurements of radiation levels shall be taken one meter from exposed surfaces and other appropriate locations and recorded daily. The Containerized Waste Facility SRSO shall be notified when the exposure rate at the Restricted Area boundary exceeds 15 microrem per hour after disposal operations are complete for the day. Notification shall be documented and retained on site for state inspector review."

This sentence was moved into Condition 76 from the WMP, which will be eliminated as part of Amendment 20.

Regarding License Condition 78.C, the licensee in a letter dated September 24, 2003, request raising the external gamma radiation level at the surface of a waste container from 50 R/hr up to 200 R/hr for the required practice run. Over the past year or so, the licensee has requested an exemption to conduct the practice run from the Executive Secretary. This exemption has been granted based on the following factors: 1) the shipments have been all Type A or Type B transportation casks; 2) the waste containers are similar in design and are handled in the same manner; 3) the exemption has been granted each time the exemption was requested; and 4) the increase to 200 R/hr compliments License Conditions 80 and 81. Therefore, the DRC has accepted the licensee's request and will change the 50 R/hr exposure rate up 200 R/hr for which a practice run will be required.

In addition, for continuity the DRC moved the language in License Condition 79, up into License Condition 78C. Condition 79 requires the licensee to notify the Division 24 hours in advance of conducting the practice run. License Condition 79 will be reserved.